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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,030	10/15/2003	Akihito Uetake	9319S-000527	6413

27572 7590 10/19/2004

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EXAMINER	
KOSOWSKI, ALEXANDER J	
ART UNIT	**PAPER NUMBER**
2125	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/686,030	**Applicant(s)** UETAKE ET AL.
	Examiner Alexander J Kosowski	**Art Unit** 2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2003*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-13* is/are rejected.
7)☒ Claim(s) *4 and 5* is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *15 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☒ All b)☐ Some * c)☐ None of:
1.☒ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *10/15/03*.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1) Claims 1-13 are presented for examination.

Specification

2) The disclosure is objected to because of the following informalities:

Throughout the specification, there are several references to the term "OA products". For instance, see Paragraph 0004 on Page 1 of the specification. However, the acronym "OA" is not defined.

Appropriate correction is required.

Allowable Subject Matter

3) Claims 4-5 are objected to as being dependent upon a rejected base claim, but may be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

4) The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5) Claims 1-10 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are the means to perform the system functions and method steps (i.e. a computer). As currently claimed, Claims 1, 2 and 9 could be performed using a pencil and paper or in the mind of a user, which is not how the invention is taught in the specification. Claims 3-8 and 10-12 inherit the above rejection through dependency.

6) Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Referring to claim 9, the preamble of the claim does not appear to be a statutory class (i.e. system or method).

7) Claims 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Referring to claims 11-12, the claims are dependent on claims 9-10 and are directed towards a computer program process, while the parent claims (9-10) are directed towards a system. In addition, claims 11-12 are substantial duplicates of claims 9-10. It is unclear to the examiner what claims 11-12 are directed towards. Examiner suggests claims 11-12 be amended to become a separate set of independent / dependent claims.

Claim Rejections - 35 USC § 102

8) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9) Claims 1-3 and 6-13 are rejected under 35 U.S.C. 102(b) as being unpatentable by Suzuki et al (U.S. Pat 6,226,617).

Referring to claim 1, Suzuki teaches a system comprising: object identification information input means for inputting object identification information for identifying a recycling object (col. 13 line 65 through col. 4 line 1), object disassembly information storage means for storing object disassembly information for constructing a plurality of different disassembly diagrams during a process of disassembling the recycling object by associating the object disassembly information with the object identification information (col. 14 lines 1-2 and col. 18 lines 19-26), object disassembly information retrieving means for retrieving the object disassembly information from the object disassembly information storage means based on the object identification information input by the object identification information input means (col. 14 lines 2-8); disassembly diagram constructing means for constructing the disassembly diagrams based on the object disassembly information found by the object disassembly information retrieving means (col. 19 lines 41-45 and col. 20 lines 37-55), and disassembly diagram output means for outputting the disassembly diagrams constructed by the disassembly diagram constructing means (col. 14 lines 8-10 and col. 18 lines 46-58), wherein the disassembly diagram constructing means constructs any one of the plurality of disassembly diagrams which can be constructed through the object disassembly information found by the object disassembly information retrieving means depending on a progress condition of a disassembly job of the recycling object (col. 31 lines 52-54 and col. 32 lines 31-47).

Referring to claim 2, Suzuki teaches recycling center equipment comprising: object identification information read-out means for reading out object identification information for identifying the recycling object (col. 13 line 65 through col. 4 line 1), object identification information transmitting means for transmitting the object identification information read out by the object identification information read-out means to the information management center equipment (col. 20 line 66 through col. 21 line 9), object disassembly information receiving means for receiving object disassembly information for constructing a plurality of different disassembly diagrams during a process of disassembling the recycling object (col. 14 lines 2-8), disassembly diagram constructing means for constructing the disassembly diagrams based on the object disassembly information received by the object disassembly information receiving means (col. 19 lines 41-45 and col. 20 lines 37-55), and disassembly diagram display means for displaying the disassembly diagrams constructed by the disassembly diagram constructing means (col. 14 lines 8-10 and col. 18 lines 46-58), and information management center equipment comprising: object disassembly information storage means for storing the object disassembly information by associating the object disassembly information with the object identification information (col. 14 lines 1-2 and col. 18 lines 19-26), object identification information receiving means for receiving the object identification information (col. 13 line 65 through col. 4 line 1); object disassembly information retrieving means for retrieving the object disassembly information from the object disassembly information storage means based on the object identification information received by the object identification information receiving means (col. 14 lines 2-8), and object disassembly information transmitting means for transmitting the object disassembly information found by the object disassembly information retrieving means to the recycling center equipment (col. 14 lines 8-10 and col. 18 lines 41-45), wherein the disassembly diagram constructing means constructs any one of the plurality of disassembly diagrams which can be constructed through the object disassembly information received by the object disassembly information receiving means depending on a progress condition of a disassembly job of the recycling object (col. 31 lines 52-54 and col. 32 lines 31-47).

Referring to claim 3, Suzuki teaches that the recycling center equipment further comprises external image taking means for taking an external image of the recycling object, and wherein the disassembly diagram constructing means determines a progress condition of the disassembly job of the recycling object based on the external image taken by the external image taking means, and depending on the progress condition determined by the disassembly diagram constructing means, constructs any one of the plurality of disassembly diagrams which can be constructed through the object disassembly information received by the object disassembly information receiving means (col. 33 lines 15-53).

Referring to claim 6, Suzuki teaches that the disassembly diagram constructing means constructs the disassembly diagrams as a front view of the recycling object when seen from a viewpoint of a disassembly operator (col. 18 lines 46-58).

Referring to claim 7, Suzuki teaches that the disassembly diagrams include instructions for classifying component materials constituting the recycling object (col. 21 lines 10-39).

Referring to claim 8, Suzuki teaches that the disassembly diagrams include instructions for indicating positions of screws for coupling components constituting the recycling object (col. 19 lines 46-50).

Referring to claim 9, Suzuki teaches a system comprising: object identification information read-out means for reading out object identification information for identifying the recycling object from the recycling object (col. 13 line 65 through col. 4 line 1), object identification information transmitting means for transmitting the object identification information read out by the object identification information read-out means to the information management center equipment (col. 20 line 66 through col. 21 line 9), object disassembly information receiving means for receiving object disassembly information for constructing a plurality of different disassembly diagrams during a process of disassembling the recycling object (col. 18 lines 28-37), disassembly diagram constructing means for constructing the disassembly diagrams based on the object disassembly information received by the object disassembly information receiving means (col. 14 lines 1-2 and col. 18 lines 19-26), and disassembly diagram display means for displaying the disassembly diagrams constructed by the disassembly diagram constructing means (col. 14 lines 8-10 and col. 18 lines 46-58), wherein the disassembly diagram constructing means constructs any one of the plurality of disassembly diagrams which can be constructed through the object disassembly information received by the object disassembly information receiving means depending on a progress condition of the disassembly job of the recycling object (col. 31 lines 52-54 and col. 32 lines 31-47).

Referring to claim 10, Suzuki teaches information management center equipment comprising: object disassembly information storage means for storing object disassembly information by associating the object disassembly information with object identification information (col. 14 lines 1-2 and col. 18 lines 19-26), object identification information receiving means for receiving the object identification information (col. 13 line 65 through col. 4 line 1), object disassembly information retrieving means for retrieving the object disassembly information from the object disassembly information storage means based on the object identification information received by the object identification information receiving means (col. 14 lines 2-8), and object disassembly information transmitting means for transmitting the object disassembly information found by the object disassembly information retrieving means to the recycling center equipment (col. 14 lines 8-10 and col. 18 lines 41-45).

Referring to claims 11-12, the claims vary from claims 9-10 in that they claim a computer system program rather than a system. The system taught by Suzuki could inherently be implemented on a computer system program. Therefore, referring to claims 11-12, see rejection of claims 9-10 above.

Referring to claim 13, Suzuki teaches a method comprising inputting object identification information for identifying a recycling object (col. 13 line 65 through col. 4 line 1), retrieving object disassembly information based on the object identification information input in the object identification information input step from object disassembly information storage means for storing the object disassembly information for constructing a plurality of different disassembly diagrams during a process of disassembling the recycling object by associating the object disassembly information with the object identification information (col. 14 lines 1-2 and col. 18 lines 19-26 and col. 14 lines 2-8), constructing the disassembly diagrams based on the object disassembly information from the object disassembly information retrieving step (col. 19 lines 41-45 and col. 20 lines 37-55); and outputting the disassembly diagrams constructed in the disassembly diagram constructing step (col. 14 lines 8-10 and col. 18 lines 46-58), wherein the disassembly diagram constructing step constructs any one of the plurality of disassembly diagrams which can be constructed through the object disassembly information from the object disassembly information retrieving step depending on a progress condition of the disassembly job of the recycling object (col. 31 lines 52-54 and col. 32 lines 31-47).

Conclusion

10) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamrom et al (U.S. PGPUB 2003/0097195) – teaches a method for computing disassembly sequences.

Gadh et al (U.S. Pat 6,725,184) – teaches disassembly sequences of components.

Suzuki et al (U.S. Pat 6,633,795) – teaches manufactured article recycling.

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander J Kosowski whose telephone number is 703-305-3958. Please NOTE that after 10/13/04, the examiner's new phone number will be 571-272-3744. The examiner can normally be reached on Monday through Friday, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703-308-0538. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. In addition, the examiner's RightFAX number is 703-746-8370.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Alexander J. Kosowski
Patent Examiner
Art Unit 2125

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